

REMARKS

Claims 1-24 are pending in this application, with claims 14-19 being withdrawn from consideration. Claim 24 is objected to due to a typographical informality. Claim 5 is rejected under 35 USC 112, second paragraph, as being indefinite. Claim 1 is rejected under 35 USC 102 as being anticipated by Strangman. Claims 1 and 5 are rejected under 35 USC 102 or in the alternative under 35 USC 103(a) as being unpatentable over DiConza. Claims 22 and 24 are rejected under 35 USC 102 or in the alternative under 35 USC 103(a) as being unpatentable over Cairo. Claims 20 and 21 are allowed. Claims 2-4, 6-13 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As a first procedural matter, the applicants request that the Examiner consider the thirty-six references shown on the attached Form 1449B/PTO. This form was originally submitted along with the originally filed application papers; however, the Examiner has not considered these references. It appears from the public PAIR information that this Information Disclosure Statement was not entered into the USPTO records when the original application was processed. Note that the original application cover sheet and the return receipt postcard clearly indicate that an Information Disclosure Statement was included. The application cover sheet is available in PAIR, and a copy of the postcard listing "Information Disclosure Statement by Applicant: 36 cited references" that was stamped and returned by the USPTO is attached to this response as proof of the original submittal of these references. The applicants believe that no fee is necessary for the consideration of these references since they were properly submitted with the original application papers. However, should the Examiner determine that a fee is necessary, a charge to Deposit Account No. 19-2179 is hereby authorized. The Examiner is requested to notify the undersigned attorney in advance of any such charge.

Moving now to substantive issues, please note that withdrawn claims 14-19 are cancelled herein, claim 24 is amended to correct the informality identified by the

Examiner, and claim 5 is amended to provide a proper antecedent basis, thereby correcting all of the non-art objections/rejections cited by the Examiner.

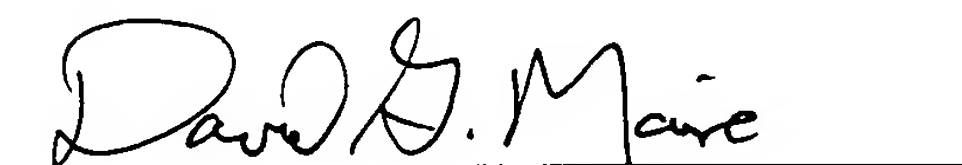
The applicants traverse the rejection of claim 1 in view of Strangman. Strangman describes a bond coat 10 disposed between a CMC material 12 and a top coating of abradable ceramic material 14. A plurality of ceramic particles 16 provides a high surface roughness between the bond coat and the abradable top coating. The Examiner incorrectly concludes that the particles 16 are partially embedded into the CMC material 12. As can be seen in FIG. 1 of Strangman, the particles do not even contact the CMC material. Column 2, lines 33-37 of Strangman describes how the particles are deposited onto the top surface of the bond coating by raining the particles onto the wet bond coat surface. No force is applied to drive the particles into the CMC material. In fact, Strangman actually teaches away from doing so, since the sole stated purpose of the particles is to provide a surface roughness between the bond coating and the overlying top coating, and forcing the particles down into the CMC material would submerge them into the layer of bond coating, which in turn would destroy their functionality as taught by Strangman. Thus, the Strangman reference does not support the rejection of claim 1 under 35 USC 102 or 103 and these rejections should be withdrawn.

The applicants also traverse the rejection of claims 1 and 5 in view of DiConza. DiConza describes a well known MCrAlY bond coating applied over a substrate, such as a metal alloy of ceramic matrix composite material, with a ceramic thermal barrier coating applied over the bond coating. The Examiner incorrectly concludes that alloy particles of the bond coating are partially embedded into the substrate. Such embedding does not occur, in fact DiConza teaches away from embedded particles because the bond coating is applied to the substrate surface in either a plasma, liquid or vapor state (i.e. not as solid particles) by the methods cited by the Examiner in the Office Communication. Figures 1-3 of DiConza show the interface between the respective substrates and bond coatings and no embedded particles are visible even under the level of magnification used in these photomicrographs. Thus, the DiConza reference does not support the rejection of claims 1 and 5 under 35 USC 102 or 103 and these rejections should be withdrawn.

Objected-to claim 23 has been amended to include the limitations of base claim 22, thereby placing claim 23 into condition for allowance. Claim 22 has been cancelled, thereby rendering moot its rejection in view of Cairo. Claim 24 has been made dependent upon now-allowable claim 23.

Reconsideration of the amended application in view of the prior art cited in the attached Form 1449B/PTO and allowance of claims 1-13, 20, 21, 23 and 24 are respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script that reads "David G. Maire". The signature is written in black ink and is positioned above a horizontal line.

David G. Maire (Reg. No. 34,865)

Beusse Brownlee Wolter Mora & Maire, P.A.
390 North Orange Ave., Suite 2500
Orlando, FL 32801
Telephone: 407-926-7704